

REMARKS

Claims 15, 22, 29, 35-42, 44, 46, 47, 54, 57, and 62 are amended, claims 1-14 are cancelled, claims 69-74 are new, and claims 15-74 are pending.

As a preliminary matter, Applicants respectfully request acknowledgement of the drawing changes that were filed on July 14, 2006. These drawing changes were filed in response to a drawing objection made in the previous Office Action. If the drawing changes have not been received and accepted, the Examiner is requested to contact the undersigned.

Claims 15-28, and 35-68 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,491,484 to Schuermann in view of U.S. Patent No. 5,483,827 to Kulka et al (hereinafter Kulka). Claims 29-34 stand rejected under 35 U.S.C. §102(e) as being anticipated by Schuermann.

Claim 15 has been amended to recite purposely reducing a transmitter range of a device. Support for this amendment may be found, for example, at paragraph 44 and original claims 2 and 5 of the specification. Schuermann does not disclose purposely reducing a transmitter range, receiver range, or communications range. To the contrary, Schuermann discloses a method of maximizing communications efficiency between an interrogator unit and a responder unit. By maximizing communications efficiency, the method maximizes a communications range between the interrogator unit and the responder unit.

Schuermann's responder unit generates and transmits an RF carrier wave via an on-board RF carrier wave generator. The frequency of the generated RF carrier wave might not precisely match the frequency at which a receiver of the interrogator unit is tuned even if the RF carrier wave generator of the responder is nominally set to the same frequency of the interrogator unit's receiver. For example, Schuermann discloses that the RF carrier wave received by the interrogator unit might be off frequency due to temperature, aging, or environmental effects associated with the responder unit.

To overcome this frequency mismatch, Schuermann discloses measuring, at the interrogator unit, the RF carrier wave transmitted by the responder unit. If the frequency of the received RF carrier wave is not optimally tuned with respect to the frequency of the interrogator unit receiver, the interrogator unit sends a message to the responder unit requesting that the responder unit alter the frequency of its RF carrier wave generator. The interrogator unit then measures an RF carrier wave subsequently transmitted by the responder unit to determine whether the frequency change specified in the message effectively minimized or eliminated the frequency mismatch. If a frequency mismatch is still present, the method may be repeated until the frequency mismatch is satisfactorily minimized or eliminated.

Accordingly, Schuermann discloses optimizing a transmitting frequency of a responder unit to increase a communications range between an interrogator unit and a responder unit. Thus, Schuermann does not disclose purposely

reducing a communication range and in fact teaches away from reducing a communication range by disclosing a method of increasing a communication range. Accordingly, Applicants assert that claim 15 and the claims that depend from claim 15 are allowable.

Claims 22, 29, 35, 37, 54, 57, and 62 have been amended in a manner similar to claim 15. Accordingly, Applicants assert that claims 22, 29, 35, 37, 54, 57, and 62 and the claims that depend from claims 22, 29, 35, 37, 54, 57, and 62 are allowable for at least the reasons described above in relation to claim 15.

Claim 42 has been amended to recite a backscatter transmitter. Support for this amendment may be found, for example, in original claims 42 and 49 of the specification. Neither Schuermann nor Kulka disclose a backscatter transmitter. Kulka discloses an active transmitter powered by a battery and Schuermann, as was described above, discloses an RF carrier wave generator. Although Schuermann's responder unit stores energy received from an interrogator unit in an energy accumulator, the responder unit is not a backscatter transmitter because it uses the stored energy to generate its own CW signal rather than selectively reflecting a CW signal transmitted by the interrogator.

In general, backscatter transmitters reflect a signal received from an interrogator. Thus, a backscatter transmitter does not transmit unless it is simultaneously receiving a signal from an interrogator. Schuermann teaches away from the use of a backscatter transmitter since Schuermann discloses, at

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col. 4 lines 64-67, that the responder unit responds to a message received from the interrogator unit after the interrogator ceases transmitting.

Claims 44, 46, and 49 have been amended in a manner similar to claim 42. Accordingly, Applicants assert that claims 44, 46, and 49 and the claims that depend from claims 44, 46, and 49 are allowable for at least the reasons described above in relation to claim 42.

New Claim 69 is supported by, for example, paragraph 35 of the specification.

In view of the foregoing, allowance of claims 15-74 is requested.

If the Examiner's next anticipated action is to be anything other than a Notice of Allowance, the undersigned respectfully requests a telephone interview prior to issuance of any such subsequent action.

Respectfully submitted,

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